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Three new brachypterous Athetini from North Korea (Coleoptera: Staphylinidae, Aleocharinae)

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Abstract: Two species of *Geostiba* THOMSON and one species of *Tropimenelytron*, a genus group name whose author is here argued to be PACE and not SCHEERPELTZ as previously believed and which is currently treated as a subgenus of *Pelioptera* KRAATZ, are described and illustrated: *Geostiba* (*Ditroposipalia*) *myohyangensis* sp. n., *G. (D.) pasniki* sp. n., and *Pelioptera* (*Tropimenelytron*) *koreana* sp. n. Both genera are recorded from North Korea for the first time. The new taxa are distinguished from closely related congeners from the adjacent Russian Far East.

Key words: Coleoptera, Staphylinidae, Aleocharinae, *Geostiba*, *Pelioptera*, *Tropimenelytron*, Palaearctic region, North Korea, taxonomy, new species

Introduction

The staphylinid fauna of the Manchurian subregion of the Palaearctic region is poorly known. This particularly applies - taxonomically - to the subfamily Aleocharinae and - geographically - to North Korea. So far, only few Aleocharinae have been described from the area; none of them in the genera *Geostiba* THOMSON 1858 and *Pelioptera* KRAATZ 1857. From the adjacent Russian Far East, however, three species of *Geostiba* and one of *Pelioptera* have recently become known: *G. (Sipalotricha) vladivostokensis* PACE 1997 (Primorskiy Kray), *G. (Ditroposipalia) sakhalinensis* PACE 1997 (Primorskiy Kray, Sakhalin), *G. (D.) kusnetzovi* ZERCHE (in press) (Chabarowskiy Kray), and *Pelioptera* (*Tropimenelytron*) *sakhalinensis* PACE 1998.

When treating the genus *Tropimenelytron*, PACE (1983) attributed the genus to SCHEERPELTZ (1955) (recte: 1951). The latter author, however, merely suggested the new genus group name for *Homalota tuberiventris* EPPELSHEIM 1880 separating it from *Sipalia* auctt. nec MULSANT & REY (now *Geostiba*) "wegen ihres ganz anderen anatomischen Bautypus sowohl der Mundteile und des Ektoskelettes, als auch des Kopulationsapparates der ♂♂ ..." (SCHEERPELTZ 1951). Since no distinguishing characters are actually described, the criteria of availability according to Article 13 of the Code (ICZN 1999) are not met. PACE (1983) was the first to provide a valid description of *Tropimenelytron*, so that he must be considered the author of this genus group name. In addition to the type species, *T. tuberiventris* (EPPELSHEIM), five species from the Himalayas were later described in the genus (PACE 1984, 1987). Only recently, PACE (1998) added two more species, one from China and one from Sakhalin, at the same time attributing *Tropimenelytron* to *Pelioptera* KRAATZ as a subgenus (together with

Geostibida PACE 1984) without further comment. Based on a cursory examination of external and sexual characters of species of *Tropimenelytron* and *Pelioptera*, I have doubts that, after inclusion of the former in the latter, *Pelioptera* should represent a monophyletic taxon. Nevertheless, the systematic concept suggested by PACE (1998) is here maintained, mainly for practical reasons and because the systematic position of *Tropimenelytron* can be clarified satisfactorily only by a comprehensive phylogenetic study of *Pelioptera*, *Tropimenelytron*, and allied genera, which is not the object of the present paper.

Descriptions of new species

Geostiba (Ditroposipalia) myohyangensis sp. n. (Figs 1-5)

H o l o t y p e ♂ : Corea sept. 1983, Myohyong Mts. Exp. Inst. Zool. Cr. / *Geostiba* sp. det. G. Paśnik 1999 / Holotypus *Geostiba myohyangensis* sp. n. det. V. Assing 2000 (Institute of Systematics and Evolution of Animals, PAS, Krakow).

P a r a t y p e ♀ : same data as holotype (coll. Assing).

D e s c r i p t i o n : In external appearance, i. e. coloration, size, and proportions, highly similar to *G. sakhalinensis* PACE (for details see redescription in ZERCHE (in press)), from which the new species is distinguished only by the relatively narrower pronotum and the primary and secondary sexual characters.

Pronotum only slightly (1.11 - 1.12x) wider than head (*G. sakhalinensis*: 1.15 - 1.25x).

♂ : elytra with weakly pronounced sutural carinae; tergum VII with a close pair of minute oblong tubercles in the middle of hind margin; sternum VIII indistinctly pointed posteriorly (Fig. 4). (In *G. sakhalinensis*, the sutural carinae are much broader and more distinctly elevated, the tubercles on tergum VII are more distinct and wider apart, at least in larger ♂♂, and sternum VIII is more distinctly pointed posteriorly.) Median lobe of aedeagus with relatively longer ventral process; "crista apicalis" more pronounced, longer, and separated from base of ventral process by a greater distance (Figs 1, 2). (A description of the paramerae is not possible, since they were missing in the dissected holotype.)

♀ : posterior margins of tergum VIII and sternum VIII moderately convex, that of sternum VIII without central concavity (Fig. 5); duct of spermatheca proximally strongly dilated (Fig. 3).

D e r i v a t i o n o m i n i s : The name refers to the type locality of the species.

C o m p a r a t i v e n o t e s : For separation from *G. sakhalinensis* see description above. In *G. kusnetzovi* ZERCHE (holotype and two paratypes examined), the body is of distinctly lighter colour, the abdomen is only weakly dilated, the pronotum is less distinctly narrowed posteriorly, the elytra are extensively impressed, the sutural carinae on the ♂ elytra are more pronounced, shorter and more widely separated, the tubercles on the ♂ tergum VII are more pronounced, and the primary sexual characters are different (see figures in ZERCHE (in press)). *G. vladivostokensis* PACE of the subgenus *Sipalotricha* SCHEERPELTZ is distinguished from *G. myohyangensis* by the much larger eyes and many other characters (see PACE 1997, ZERCHE in press).

Distribution: The new species is known only from the Myohyangsan (40°01N, 126°19E) in North Korea.

***Geostiba (Ditroposipalia) pasniki* sp. n. (Figs 6-9)**

Holotype ♂: Korea 1974, Pakjon, 78, 7/VI.AS. / *Geostiba* sp. det. G. Paśnik 1999 / Holotypus *Geostiba pasniki* sp. n. det. V. Assing 2000 (Institute of Systematics and Evolution of Animals, PAS, Krakow).

Description: Of similar coloration, size, and proportions as *G. kusnetzovi* ZERCHE (types examined), but distinguished as follows:

♂: elytra with shallow, but distinct and also posteriorly delimited impressions; sutural carinae similar to those in *G. myohyangensis*, extending over whole length of suture, but very narrow and weakly elevated; tergum VII near hind margin with a close pair of distinct oblong tubercles, which are separated only by a distance approximately equal to their width. (In *G. kusnetzovi*, the elytral impressions are deeper, more extensive, and posteriorly extending to hind margin; the sutural carinae are shorter, extending only over first half of suture or little more, broader, more strongly elevated, and separated from suture; the tubercles on tergum VII are separated by a distance approximately equal to their length.) Sternum VIII obtusely pointed posteriorly (Fig. 9). Median lobe of aedeagus and apical lobe of paramere as in Figs 6-8, internal sac of aedeagus with several long spines.

♀: unknown.

Derivatio nominis: The species is dedicated to Grzegorz Paśnik, Krakow, who kindly made the material that the present paper is based on available to me.

Comparative notes: For separation from *G. kusnetzovi* see description above. *G. sakhalinensis* and *G. myohyangensis* differ in the darker colour, the more strongly widened abdomen, the absence of distinct elytral impressions, and the primary and secondary sexual characters (see description and comparative notes below *G. myohyangensis*).

Distribution: The new species is known only from Pagon (38°04N, 126°34E) in southern North Korea.

***Pelioptera (Tropimenelytron) koreana* sp. n. (Figs 10-14)**

Holotype ♂: Corea septentr., Hamjong-pukdo, 2-6 X 1991 ISEZ / *Geostiba* sp. det. G. Paśnik 1999 / Holotypus *Pelioptera (Tropimenelytron) koreana* sp. n. det. V. Assing 2000 (Institute of Systematics and Evolution of Animals, PAS, Krakow).

Paratype ♂: same data as holotype (coll. Assing).

Description: Of similar external appearance as *P. tuberiventris*.

3.4 - 3.6 mm. Colour of body reddish brown to castaneous, with the hind margins of the abdominal segments lighter, the elytra testaceous, and the appendages rufous to testaceous. Microsculpture of forebody microreticulate as in *P. tuberiventris*, but on the whole shallower; puncturation weaker than in average *P. tuberiventris*.

Head similar to that in *P. tuberiventris*, but postgenae in dorsal view at least slightly longer than diameter of eyes, of less convex outline, parallel or diverging behind eyes; eyes apparently of very variable size, in the paratype approximately only half and in the

holotype two thirds the length of postgenae; antennae of similar length and proportions as in *P. tuberiventrīs*.

♂: pronotum as long as wide or slightly longer than wide, more slender than in *P. tuberiventrīs*; surface without larger punctures (in *P. tuberiventrīs* usually with four larger punctures); posterior margin in the middle emarginate, distinctly projecting caudad and slightly erect (more so than in *P. tuberiventrīs*). Elytra in anterior half near scutellum with pronounced pair of oblong, approximately parallel tubercles (which, in *P. tuberiventrīs*, are longer, broader, and more or less strongly bent). Terga III and IV with more or less circular median tubercle at or near posterior margin, that of tergum IV more distant from margin than in *P. tuberiventrīs*, separated by a distance approximately equal to its diameter; tergum VII with distinctly more oblong median tubercle at posterior margin than in *P. tuberiventrīs*; tergum VIII serrate posteriorly (Fig. 13); hind margin of sternum VIII moderately convex (Fig. 14). Aedeagus with median lobe and apical lobe of paramere as in Figs 10-12, ventral process of median lobe with lateral margins more or less evenly converging apically.

♀: unknown.

Derivatio nominis: The name (adj.) is derived from Korea, where the new species is the only known representative of *Tropimenelytron*.

Comparative notes: For separation from the type species of *Tropimenelytron*, *P. tuberiventrīs*, see description above; for illustrations of external and sexual characters of that species see PACE (1993). In the only geographically close representative of the subgenus, the somewhat smaller *P. sakhalinensis* from Sakhalin (holotype examined), the head is more slender and of more ovoid outline, the antennae are more distinctly incrassate apically and have more transverse penultimate antennomeres, the pronotum has four larger punctures, the ♂ pronotum is less strongly projecting caudad, the tubercles on the ♂ elytra are much less pronounced, the abdominal tubercles are absent, and the aedeagus is of different morphology; for comparison see figures in PACE (1998).

Distribution: *P. koreana* is currently known only from the type locality in the northeast of North Korea.

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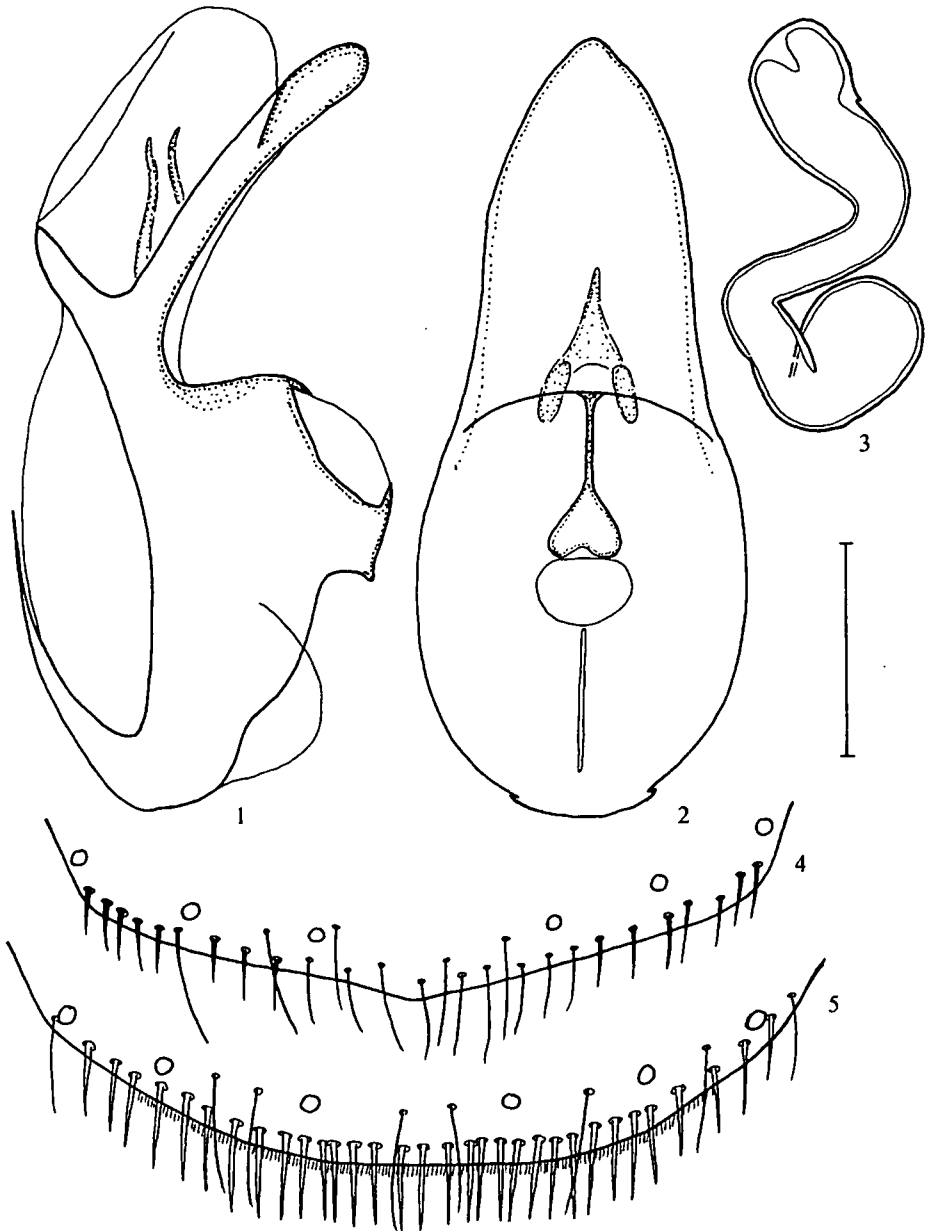
Zusammenfassung

Zwei Arten der Gattung *Geostiba* THOMSON und eine Art der Gattung *Pelioptera* KRAATZ, Subgenus *Tropimenelytron* PACE (nec SCHEERPELTZ), werden aus Nordkorea beschrieben: *G. (Ditroposipalia) myohyangensis* sp. n., *G. (D.) pasniki* sp. n. und *Pelioptera (Tropimenelytron) koreana* sp. n. Ihre primären und sekundären Sexualmerkmale werden abgebildet. Beide Gattungen werden erstmals aus Nordkorea gemeldet.

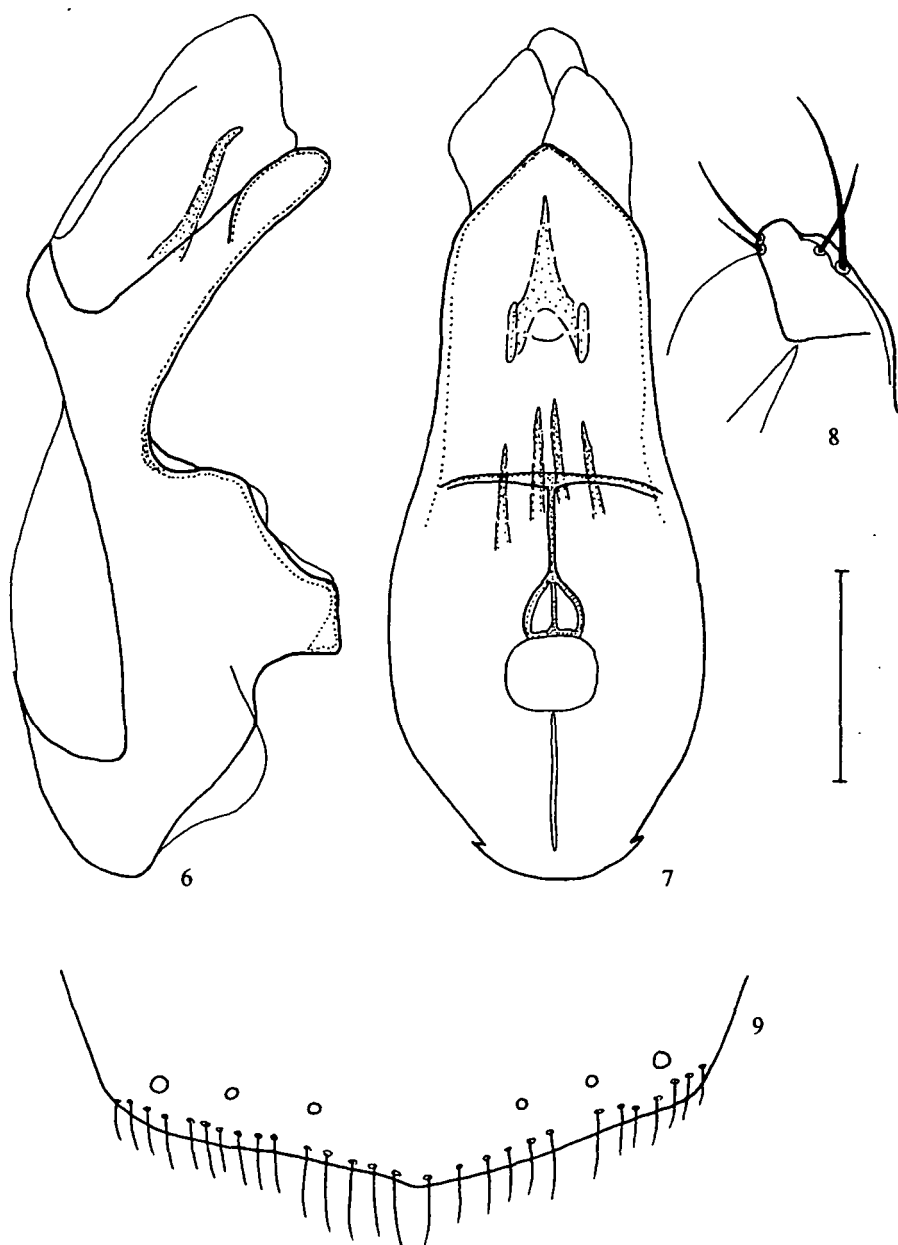
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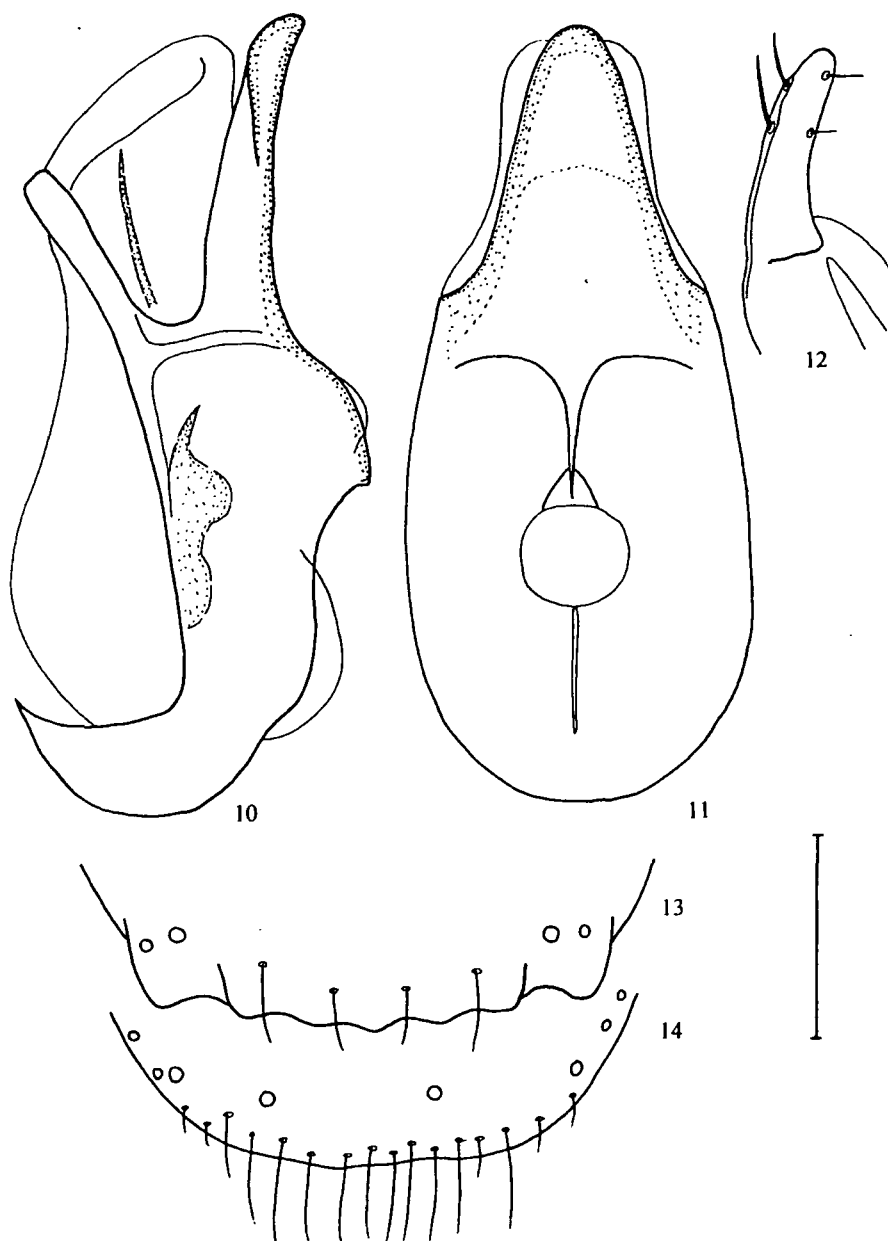
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Figs 1-5: *Geostiba myohyangensis* sp. n.: 1, 2 – median lobe of aedeagus in lateral and in ventral view; 3 – spermatheca; 4 – posterior margin of ♂ sternum VIII (long setae omitted); 5 – posterior margin of ♀ sternum VIII (long setae omitted). Scale: 0.1 mm.



Figs 6-9: *Geostiba pasniki* sp. n.: 6, 7 – median lobe of aedeagus in lateral and in ventral view; 8 – apical lobe of paramere; 9 – posterior margin of ♂ sternum VIII (long setae omitted). Scale: 0.1 mm.



Figs 10-14: *Pelioptera (Tropimenelytron) koreana* sp. n. (holotype): **10, 11** – median lobe of aedeagus in lateral and in ventral view; **12** – apical lobe of paramere; **13** – posterior margin of ♂ tergum VIII (long setae omitted); **14** – posterior margin of ♂ sternum VIII (long setae omitted). Scale: 0.1 mm.